

TESTIMONY OF

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VICE PRESIDENT, COMMUNICATIONS AND GOVERNMENT AFFAIRS
THOMSON, INC.

BEFORE THE

SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET
COMMITTEE ON ENERGY AND COMMERCE

MARCH 10, 2005

SUMMARY

As the digital television transition moves to completion, consumers, manufacturers, and retailers need the certainty of firm deadlines to ensure that their investments in this transition will reap the benefits long promised by the advocates of digital broadcasting.

The marketplace is responding impressively to this Committee's approach of "targeted intervention" in key areas of the DTV transition, and indeed, this intervention – including the establishment of hard deadlines where needed – has provided stakeholders with the requisite certainty to make critical business decisions. The results speak for themselves: in the past few years: DTV product sales have increased dramatically (and are projected to almost double within the next year alone); prices for DTV products have dropped precipitously; consumers have access to an increasing amount of HDTV programming; DTV signals now reach almost every American household, and critical progress has been made in the areas of cable compatibility and digital broadcast content protection. However, important work remains to be done to ensure a consumer friendly conversion to DTV.

First, DTV must be made affordable to the average consumer. Recognizing that smaller-sized, low-cost televisions far outsell all other categories of TVs, RCA is leading the way by introducing *this year* a line of standard-definition DTVs that for the first time will offer consumers digital television at essentially "analog" prices. Starting from under \$300 for a 27-inch model, consumers will be able to replace their old analog TV with a digital TV. While not designed to display HDTV, these sets will offer improved picture quality and are ideal for receiving multiple additional streams of standard-definition programming when transmitted by a local broadcaster. In addition, pending the establishment of a firm analog spectrum return date, Thomson also is planning to introduce a Digital-to-Analog RCA converter box carrying a suggested retail price of under \$125.

Second, broad-based consumer education is a responsibility of all DTV stakeholders. The consumer electronics industry is keenly aware of the need to educate all American consumers about the DTV transition and is fully engaged in that effort – not only targeting consumers, but also retailers, from whom consumers receive most of their product information. Effectively reaching every consumer, however, will require that other DTV stakeholders – including broadcasters, cable and satellite operators – increase dramatically their outreach to consumers to ensure that no U.S. household is unprepared when the end of the transition finally arrives.

Third, consumers must receive some "added value" for their DTV purchase. Because consumers ultimately are being forced to make some sort of DTV purchase, that purchase must, in exchange, offer some added value, regardless of whether they invest in a high-end HDTV, an SDTV or simply get a converter box for their existing analog equipment. This includes more digital programming – both HDTV and multicast SDTV – and delivered to the consumer in the same quality and resolution that it left the broadcast tower. It also means meeting consumers' expectations that they will be able to access and interact with digital television just as easily and conveniently as they interact today with analog TV. This includes preserving their ability to receive cable-delivered programming without the need for a set-top box, and preserving their established home recording capabilities.

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Thank you, Chairman Upton, Ranking Member Markey and Members of the Subcommittee for the opportunity to provide Thomson's and TTE Corporation's perspectives on how to complete a *consumer friendly* transition to digital television. My name is Dave Arland, and I am Vice President for Communications and Government Affairs for Thomson's Connectivity Business Unit.

Thomson is an international company that provides technology, systems and services to help its media & entertainment clients – content creators, content distributors and users of its technology – to realize their business goals and optimize their performance in a rapidly changing technology environment. Our goal is to become the preferred partner to the media and entertainment industries through our Technicolor, Grass Valley, RCA, and THOMSON brands.

I'm also here today to represent TTE Corporation, a joint venture established last summer between China's largest television manufacturer, TCL, and Thomson, one of Europe's largest companies serving the media and entertainment industries. TTE is a leading global television enterprise, specializing in research and development, manufacturing, and sales of TV products. TTE offers a complete range of television products – from budget to premium, from basic features to high-end innovation. RCA-brand televisions come from TTE Corporation.

This Committee – and particularly this Subcommittee – has played an instrumental role in moving forward the DTV transition. Indeed, we believe that this intervention – including the establishment of hard deadlines where needed – has provided stakeholders with the requisite certainty to make critical business decisions. Thanks in significant measure to the Committee’s relentless prodding and the clear signals it has sent to the Commission, today we have: Digital Cable-Ready HDTV Sets that pull the plug on consumers’ dependence on a set-top box; a phased-in tuner-decoder mandate to ramp up DTV penetration as well as affordability; secure digital interfaces and the Broadcast Flag, so consumers can enjoy, and record for their personal use, ever-greater amounts of high-quality digital programming while protecting such digital content from indiscriminate redistribution over the Internet.

The marketplace has responded impressively to this Committee’s approach of targeted intervention, both formal and informal. Just look at the progress that’s been made in the past four years. When last I testified before this Subcommittee, which was almost four years ago to the day:

In 2001, fewer than a million DTV sets and displays had been sold in the U.S. Today, that number exceeds 16 million. Another 13 million units of integrated DTV products are expected to be sold this year alone.

Four years ago, the average retail price for an HDTV Monitor (without a tuner-decoder) was in the range of \$2,200. Today, that price has dropped by a third to around \$1,400.

The price drop is far more dramatic for integrated HDTV receivers. For example, our first HDTV Set was a 61-inch model that carried an \$8,000 price tag. Today, a similar 61-inch model can be found for under \$3,000 – an incredible 62 percent price reduction since the DTV transition began.

In 2001, the most affordable digital-to-analog converter box available (in fact, the first such converter box available) – the venerable RCA DTC100, offered by Thomson – was a then-remarkably-low \$549. I am pleased to announce this morning to this Subcommittee that later this year, pending the establishment of a firm deadline by which broadcasters must return their analog spectrum, Thomson will again lead the way in converter box affordability by introducing an RCA set-top converter box specifically designed to help consumers preserve the usefulness of their existing analog equipment. This small set-top receiver connects easily to an antenna and an analog TV and will carry a retail price of less than \$125 – about half the current selling price for digital-to-analog converters. Even greater strides in affordability can be made if our customers, the nation’s retailers, stock up in greater numbers, and, of course, as economies of scale are realized from increased sales. We need a firm analog spectrum return deadline to build a market for this type of affordable converter, since few consumers actually believe that a firm deadline will be established.

HDTV programming also has grown by leaps and bounds. Back in 2001, consumers purchasing an HDTV receiver or monitor could choose from only about three hours a day of HDTV programming from the major broadcast networks and, if they subscribed to cable or satellite, 5 or so pay networks that offered some HDTV programming. Today, the top broadcast networks combined offer 90 to 100 hours of HDTV programming each week, and that doesn’t even include sports programming. In addition, approximately 26 cable and satellite networks offer hundreds of hours of HDTV programming weekly.

Since 2001, the number of DTV broadcast stations on-the-air has grown from about 190 stations, mainly in the top 30 markets, collectively only covering 67 percent of all TV households, to nearly 1,400 stations in all 210 markets, covering over 99 percent of TV

households, according to NAB's latest figures. Still, and quite troublingly, more than 200 stations have yet to get their digital signal on the air, and as many as half of the DTV stations that are on-the-air still may not be operating at sufficient power to provide a DTV signal to everyone in their coverage areas. At the very least, digital TV signals ought to cover the same service area as do analog broadcasts. Consumers expect that, and so should you.

Despite the significant advances that have been made, the DTV transition remains a work in progress, with important challenges still ahead. As this Committee clearly understands, however, the biggest challenge before all of us is how to ensure that American consumers – particularly those who rely exclusively on over-the-air signals but also cable subscribers – are sufficiently prepared for the day when their analog TV signals morph to digital.

Thomson believes that our collective ability to meet this challenge depends on several important factors. First, DTV must be affordable for all consumers. Second, consumers must have the information they need to make informed DTV purchasing decisions. And third, DTV must offer consumers some tangible, added value in exchange for their forced departure from analog television.

DTV Must Be Affordable For The Average Consumer

There is perhaps no surer way to “soften the DTV landing” for consumers, not to mention increase sales and maximize penetration, than to offer a choice of DTV products that are truly affordable to the average consumer. Making DTV as affordable as possible, as quickly as possible, has been a mantra for RCA from Day One of the transition, as well as for the members of this Subcommittee.

To achieve affordability, first it's important to recognize that approximately one-half of all analog television sets sold every year in the U.S. are tabletop TVs with screen-sizes 20-inches

or smaller, typically carrying a retail price of well under \$200. These are just basic TVs, many of which are the second or third sets in a household that you find in the kitchen or bedroom. But these are consistently the industry's best-selling televisions because they are both small and affordable. And, as the Committee knows, 100% of TV sets 13-inch or larger will be subject to the tuner-decoder mandate by the middle of 2007.

Consistent with its history of introducing some of the industry's most affordable integrated DTV products, RCA once again is leading the way by introducing *this year* a line of standard definition DTVs that for the first time will offer consumers digital television at essentially "analog" prices.

Developed in the global laboratories of TTE Corporation, this new SDTV lineup still has suggested retail prices starting from under \$300. Consumers will be able to replace their old analog TV with a digital TV – specifically, a new product the industry calls SDTV, for standard-definition digital television. These sets, which range in standard aspect ratio screen sizes from 27-inch to 32-inch, include a built-in DTV reception capability, receive all 18 ATSC DTV formats, and display broadcast DTV at DVD quality. While these sets are not designed to display HDTV in its full widescreen resolution, they are ideal for another key benefit: receiving multiple additional streams of standard-definition programming when transmitted by a local broadcaster.

Looking ahead to the millions of consumers who will need a Digital-to-Analog set-top box to receive digital signals and view them on their current analog set, the new RCA low-cost set-top converter I have with me today will be available this fall at a suggested retail price of under \$125. Like RCA's SDTVs, this small converter will receive all 18 ATSC DTV formats and will enhance consumer's television experience by not only improving the analog TV's

picture quality, but by receiving and displaying all multicast signals that broadcasters choose to transmit.

Of course, these low-cost products represent just one segment of the more than 30 new models of DTV products that TTE has slated for introduction this year, including integrated tuner-decoder rear-projection Digital Light Processing (DLP™) HDTV Sets, rear projection CRT (Cathode Ray Tube) HDTV Sets, and LCD and Direct View HDTV Sets. In short, whatever the need and budget of the American consumer, TTE is committed to offering a good looking and affordable RCA solution. In the 1920's, during radio's heyday, RCA advertised that it had a "Radiola for Every Purse" – something for everyone. The same can be said today.

Broad-Based Consumer Education Is A Responsibility Of All DTV Stakeholders

The consumer electronics industry is keenly aware of the need to educate all American consumers about the DTV transition. We simply can shoot no lower than that goal, given that all American households ultimately will have to make a DTV purchase in order to continue to receive broadcast television. As I will describe, the consumer electronics industry is deeply committed and fully engaged in that education effort – not only for consumers, but also for retailers, from whom consumers receive most of their product information. We cannot do it alone, however, especially within an accelerated time frame, when Congress enforces a "hard deadline." Other DTV stakeholders – including broadcasters, cable and satellite operators – need to increase dramatically their outreach to consumers to ensure that no U.S. household is unprepared when the end of the transition finally arrives. For instance, broadcasters – who have the ability to reach every TV household quickly and repeatedly – should use that ability, through Public Service Announcements and through their regular program advertising, to better communicate with consumers about HDTV programming and the DTV transition generally.

Broadcasters have asked for this transition to help them to compete head-to-head with other digital programming services; it's time for them to get serious about promoting this transition and ensuring that consumers know as much as possible about it.

The Consumer Electronics Industry Is Educating Consumers and Retailers About The Benefits of DTV

The consumer electronics industry is engaged in a broad-based campaign to educate the public about the benefits of DTV and the wide-range of equipment choices now available to them. We also constantly engage in a number of programs, both individually as manufacturers and comprehensively as an industry, to educate retailers as a means of reaching consumers.

1. Educating Consumers To Make Informed Choices

The industry's trade association, the Consumer Electronics Association ("CEA"), last year worked with the FCC and others to provide content for the Commission's new website, DTV.GOV (<http://www.dtv.gov>). This website provides FCC-approved answers to the questions most frequently asked by consumers; a glossary explaining new DTV terminology; and a shoppers' guide explaining what every shopper should know about DTV. This website also links to TV listings where consumers can enter their zip codes to access current local DTV and HDTV programs.

If they do not already use an antenna for over-the-air analog television reception – which in most cases will be perfectly suitable for receiving digital signals, consumers can get help selecting an antenna at ANTENNAWEB.ORG (<http://www.antennaweb.org>), a complementary website operated for the last four years by CEA which uses zip codes to provide location-specific advice. Regrettably, broadcasters, despite their oft-repeated concerns about the need for over-the-air antennas, declined CEA's offer to join them in launching this extremely useful consumer

website. It is worth emphasizing that existing antennas do not need to be changed with the conversion to digital. If an antenna worked for both VHF and UHF analog reception at one's home, it will continue to work just fine for digital reception, so long as the broadcast station is operating its digital signal with full facilities equivalent to those for its analog signal. For those who do wish to purchase an antenna, there is an abundance to choose from at all price points. In fact, with sales of nearly 4 million last year, Thomson is one of the leading manufacturers and marketers of over-the-air antennas. We offer more than 46 different models under the RCA and Jensen brand names, ranging in price from \$4 to \$80.

To accelerate the digital transition, a number of publications have been designed and are distributed with the goal of educating consumers. Working with the Consumer Electronics Retailers Coalition (CERC) and the FCC, CEA designed, printed, and has made available both to retailers and industry groups, in paper form and on the CERC, FCC, and its own DTV.COM websites, a "tip sheet" that on one page clearly explains the DTV transition and basic DTV terms and technology.¹ Working with Comcast, CEA also released an educational DVD and booklet titled, *A Consumer's Guide to the Wonderful World of HDTV*. In conjunction with Dealerscope, a NAPCO publication, CEA produced an "eGear Buyer's Guide," as well as an "eGear Seller's Guide" related to DTV. CEA also recently teamed up with STARZ! to produce the educational brochure, *The 3 Simple Steps to HDTV*.

In addition, on behalf of the consumer electronics industry, CEA publishes the *HDTV Guide*. This 60-page guide, which is published three times per year, gives news of the latest DTV product developments and provides a comprehensive list of DTV products available in the

¹ A copy of the "tip sheet" is appended to this testimony.

U.S. CEA also ran a multi-page advertisement in *TV Guide* explaining the DTV transition targeted to over-the-air viewers; continues to run HDTV Update meetings in major markets to help accelerate the DTV transition at the local level; continues to sponsor the Academy of Digital Television Pioneers Awards program (<http://www.ce.org/dtvacademy>); continues to run its highly successful CEA Media Tour Program specifically targeted to inform consumers and the media about the DTV transition and to promote the sale of DTV products.

All of this, of course, is in addition to the hundreds of articles and news broadcasts that quote manufacturers who are offering a cornucopia of new DTV technologies.

Additionally, many players in the consumer electronics industry are promoting the DTV transition through their sponsorship of special high-definition broadcasts of popular sporting events. Sports fans have seen RCA sponsor the Super Bowl, the NCAA Final Four, and the U.S. Open Tennis Tournament in high-definition television, and we're just one brand among many that have helped to push the transition along.

2. Retailer Training: We Must "Educate The Educator"

It's also critically important to recognize that, when it really comes down to it, the front lines of DTV education resides in the retail stores. Many, if not most, consumers rely largely on retail sales staff to help make their DTV choices and to answer the many questions consumers typically have, such as the difference between a standard definition display and a high definition display, or the difference between an HDTV with an integrated tuner and an HDTV Monitor. The sales person who has that "deer-in-the-headlights" look when a consumer asks a question about DTV is pretty much guaranteed to chill that consumer's confidence in making any DTV decision. Even worse, purchases based on inaccurate or incomplete information from a retail

sales staff risks an even greater consumer backlash, particularly when higher-end products are involved. In other words, we must educate the educator.

In addition to retail training efforts being undertaken industry-wide by CEA (including through its operation of the website, “CEKNOWHOW.ORG” (<http://www.ceknowhow.org>), which encourages retail salespersons to obtain in-depth training about digital TV terms, products, and capabilities), Thomson and TTE are deeply involved in helping retail staff obtain the specialized, ongoing DTV training they need to ensure our customers can make informed DTV decisions.

In fact, we initiated an HDTV sales staff training program as early as 1998, when our integrated HDTV Sets were first introduced to the market. In the seven-year span since then, we have:

- Delivered over 15,000 HDTV training meetings;
- Trained over 125,000 retail sales associates;
- Conducted over 200,000 consumer demonstrations of HDTV at retail outlets nationwide; and
- Invested several million dollars in HDTV training materials, travel and personnel;
- Delivered more than 15,000 on-line HDTV training modules and tests via RCAsupport.com, and paid out \$750,000 in retail incentives for HDTV training on the Web; and
- Pioneered consumer and retailer education into non-traditional HDTV distribution channels such as home shopping networks and rental outlets.

In fact, our support of HDTV training has reached virtually every shape and size of retailer and distribution channel, utilizing virtually every conceivable type of media, from DVD, to print, to satellite broadcast, to the Internet. Notably for this Committee, we have led the way in HDTV training on integrated HDTV technology, reflecting our long-standing commitment to

its integrated HDTV product line. In short, we have been as supportive of HDTV training as any consumer electronics manufacturer, and more so than most. Here's just one example of how this training pays off for retailers: we sold more than 5,000 RCA HDTV products in one day to armchair shoppers on a home shopping channel last year. Consumers are very interested in digital television, because it delivered better picture and sound than analog. The benefits, quite literally, are clear when consumers actually see HDTV – and consumers must see a benefit to this transition.

Consumers Must See Some Added Value In Exchange For Their Forced Transition To Digital

Finally, since consumers ultimately are being forced to make some sort of DTV purchase to receive broadcast television when it migrates to a digital platform, that purchase must, in exchange, offer some added value, regardless of whether they invest in a high-end HDTV, an SDTV or simply get a converter box for their existing analog equipment. Indeed, the Freudian concept that “pleasure is merely the absence of pain,” has no application here. Consumers have been told to expect great new things from DTV. They must get great new things from DTV or they will toss great big things at all of us.

What does “added value” really mean? For one, it means digital programming – lots and lots of digital programming. High definition movies and sporting events as well as prime time programming. Multiple new standard-definition channels of local, community-oriented programming, such as news, weather, sports, ethnic, and non-English programming. We must ensure that nothing stands in the way of filling-up this huge digital pipeline to the home with as much high quality and diverse programming as content owners can produce. We owe it to consumers to enable them to receive all of that programming in the same quality and resolution that it left the broadcast tower.

It also means meeting consumers' expectations that they will be able to access and interact with digital television just as easily and conveniently as they interact today with analog TV. This includes preserving their ability to receive cable-delivered programming without the need for a set-top box, and preserving their established home recording capabilities.

Conclusion

We as a nation have made great strides toward the digital television conversion. In some ways, however, the most challenging part lies ahead: ensuring that our customers – your constituents – are comfortable with and hopefully enthusiastic about converting to digital. First, consumers cannot be harmed. That is a necessary but not sufficient condition for a successful transition. Beyond that, consumers must receive real added value from the conversion. They must have the opportunity to enjoy the full benefits of digital television technology and the accurate information to decide how they will receive it.

Both Thomson and TTE are proud of the leading role we continue to play in promoting digital television by offering consumers a choice of products, including the introduction of our new SDTV receivers offering digital TV at analog prices and this fall's introduction of low-cost RCA Digital-to-Analog converter boxes. Indeed, whether it's a movie or sports buff who wants the latest high-definition, ultra-thin DLP television, a budget-conscious consumer looking for the best value in HDTV, or someone seeking to replace an existing TV with a smaller-screen SDTV (that fits in their TV cabinet), or a lower-income household needing a cost-effective solution for watching digital signals while preserving the usefulness of their existing analog TV – Thomson and TTE have a product to fit those interests and needs.

As the digital television transition moves to completion, consumers, manufacturers, and retailers need the certainty of firm deadlines to ensure that their investments in this transition will reap the benefits long promised by the advocates of digital broadcasting.

The marketplace is responding impressively to this Committee's approach of "targeted intervention" in key areas of the DTV transition, and indeed, we believe that this intervention – including the establishment of hard deadlines where needed – has provided stakeholders with the requisite certainty to make critical business decisions. The results speak for themselves: in the past few years: DTV product sales have increased dramatically (and are projected to almost double within the next year alone); prices for DTV products have dropped precipitously; consumers have access to an increasing amount of HDTV programming; DTV signals now reach almost every American household, and critical progress has been made in the areas of cable compatibility and digital broadcast content protection.

RCA was there with the introduction of radio. We pioneered the launch of black-and-white commercial television service. We developed the analog color TV system that will soon be retired, and our technology forms the digital compression backbone of today's DTV standard. Along the way, we also popularized two of the most important home entertainment innovations in American homes: the home video recorder and the mini-dish satellite receiving system. Our motto at RCA is "Changing Entertainment. Again." And we're ready to keep pace with the products that America needs as we prepare consumers for the end of the digital television transition.

I would be pleased to respond to any questions Members might have.